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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR

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BIRCH STEWART KOLASCH & BIRCH

PO BOX 747

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Office Action Summary    G9/202_047				Applicati	on No.	Applicant(s)	
Larry R. Helms	•			09/202,0	47	ITOH ET AL.	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address → Peri d for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Eatteins or time may be available under the provision of 37 CPR 1.13(d). In no evert, however, may a reply be timely filed  Eatteins or time may be available under the provision of 37 CPR 1.13(d). In no evert, however, may a reply be timely filed  Eatteins or time may be available under the provision of 37 CPR 1.13(d). In no evert, however, may a reply be timely filed  If the period for reply specified above, the maniform statisticy period will apply and will expens (s) (i) MONTHS for the mailing date of this communication.  Finally within the set or estended period for reply will, by statutor, period will apply and will expens (s) (i) MONTHS for the mailing date of the score and period time adjustment. Set 37 CPR 1.70(d).  Status  1) □ Responsive to communication(s) filed on 6/8/01.  2) □ This action is FINAL 2b) □ This action is non-final.  3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C. D. 11, 453 O. G. 213.  Disposition of Claims  4) □ Claim(s) 1-15 (s/are pending in the application.  4a) Of the above claim(s) 1-5.10.11.14 and 15 is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) □ Claim(s) is/are allowed.  6) □ Claim(s) is/are allowed.  7) □ Claim(s) is/are allowed.  8) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Application Papers  9) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  11 □ proposed drawing correction filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  12 □ The oath or declaration is objected to by the Examiner.  13 □ All b)		Offic Action	Summary	Examine	r	Art Unit	
Pert of for Repty  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). Is no event, however, may a repty be timely filed  If the period for early specified above, the maximum statistictory period will apply and will expire SIX (6) MONTH'S from the mailing date of this communication.  If the period for repty is aperiaded above, the maximum statistictory period will apply and will expire SIX (6) MONTH'S from the mailing date of this communication.  If the period for repty aperiaded above, the maximum statistictory period will apply and will expire SIX (6) MONTH'S from the mailing date of this communication.  If the period for repty specified above, the maximum statistictory period will apply and will expire SIX (6) MONTH'S from the mailing date of this communication.  If the period for repty is aperiaded above, the maximum statistictory period will apply and will expire SIX (6) MONTH'S from the mailing date of this communication.  If apply will be a communication of SIX (7) and SIX (7) and SIX (8) and SIX (8) MONTH'S from the mailing date of this communication.  If a communication is FINAL.  2b)				Larry R.	-lelms	1642	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  The MAILING DATE OF THIS COMMUNICATION.  If the period for reply sepacified above is less blan thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days, and the considered timely.  If the period for reply sepacified above is less than thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy minimum of thirty (30) days with the consideration.  If the period for reply sepacified days is than thirty (30) days, a reply within the standardy minimum of thirty (30) days, a reply within the standardy may have deviced any the standardy minimum of thirty (30) days, a reply within the standardy may have deviced any earned and the standardy may have deviced any search of the scommunication.  Status  Application at Standardy the standardy may have deviced any search of the scommunication.  Application of Claims  4) Claim(s) 1-15 is/are pending in the application.  4) Claim(s) 1-15 is/are allowed.  5) Claim(s) 1-15 is/are allowed.  6) Claim(s) 1-15 is/are allowed.  6) Claim(s) 1-15 is/are allowed.  7) Claim(s) 1-15 is/are allowed.  8) Claim(s) 1-15 is/are allowed.  8) Claim(s) 1-15 is/are allowed.  10) The drawing(s) filed on 1-15 is/are are jected.  7) Claim(s) 1-15 is/are allowed.  10) The drawing(s) filed on 1-15 is/are are jected.  11) The drawing(s) filed on 1-15 is/are are jected.  12)			of this communication ap	pears on the	e cover sheet with the c	orrespondence address	
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#### **DETAILED ACTION**

Claims 1-15 are pending.
 Claims 6-9 and 12-13 have been amended.

- 2. Claims 1-5, 10, 11, and 14-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions. Applicant timely traversed the restriction (election) requirement in Paper No. 10.
- 3. Claims 6-9 and 12-13 are under examination.
- 4. The text of those sections of Title 35 U.S.C. code not included in this office action can be found in a prior Office Action.
- 5. The following Office Action contains some NEW GROUNDS of rejections.

# Specification

6. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

# Rejections Withdrawn

- 7. The rejection of claims 6-9 and 12-13 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in view of the amendments to the claims.
- 8. The rejection of claims 7-8 and 12-13 under 35 U.S.C. 102(e) as being anticipated by Tsui et al (U.S. Patent 5,776,667, filed 6/6/95) is withdrawn in view of the amendments to the claims.

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9. The rejection of claims 6-9 and 12-13 under 35 U.S.C. 102(b) as being anticipated by Boon et al (J. Exp. Med. 183:725-729, 3/1996, IDS #2) is withdrawn in view of the amendments to the claims.

10. The rejection of claims 6-9 and 12-13 under 35 U.S.C. 112, first paragraph, is withdrawn in view of the amendments to the claims.

### Response to Arguments

11. Claims 6-9 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakao et al (Cancer Res. 55:4248-4252, 10/1/95, IDS #2) is maintained.

The response filed 6/8/01 has been carefully considured but is deemed not to be persuasive. The response states that Applicants submit a declaration (paper #15 filed 6/28/01) by Dr. Itoh demonstrating that the claimed peptide antigens are distinct from those disclosed by Nakao et al. The declaration of Dr. Itoh has been carefully considured but is deemed not to be persuasive. The declaration states that the HPLC conditions set forth in Nakao et al gives peaks each containing plural peptides and the active peak (No. 23) corresponds to a mixture of peptides of unknown structure. In response to these arguments, the declaration does not state that the protein of Nakao et al in fraction number 23 is not that of amino acid sequence of SEQ ID NO:2 in the instant application. In addition, it is immaterial how the protein was obtained such as "expression cloning technique" because the claims are directed to the product not the method of isolation. In addition, the response fails to show a clear distinction between the claimed protein and the protein of Nakao et al as stated in the previous Office Action "Since the Patent and Trademark Office does not have the facilities for examining and comparing the claimed antigen and the antigen of Nakao et al, the burden of proof is

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upon the Applicants to show a distinction between the structural and functional characteristics of the claimed antigen and the antigen of the prior art. See <u>In re Best</u>, 562 F.2d 1252, 195 U.S.P.Q. 430 (CCPA 197) and Ex parte Gray, 10 USPQ 2d 1922 1923 (PTO Bd. Pat. App. & Int.). Moreover, the protein of Nakao et al is isolated (HPLC fractionation) and the protein in fraction 23 would inherently contain the amino acid sequence of SEQ ID NO:2 and be encoded by SEQ ID NO:1.

### The following are some NEW GROUNDS of rejections

12. Claims 6-9 and 12-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 6 has been amended to recite the limitation of "through intracellular processing" in the amendment filed 6/08/01. The amendment filed 6/08/01 does not state where in the specification support for the phrase is found. This is not persuasive because support needs to be found in the specification or the claims as originally filed. The term "decomposition" as defined by Stenesh in Dictionary of Biochemistry and Molecular Biology, second edition, page 118, 1989 is "the breakup of a chemical substance into two or more simpler substances" and the term "processing" is defined as "the series of chemical reactions whereby a newly synthesized polypeptide chain is converted to a functional protein""(see page 383). The specification does not support the definition of "possessing" and applicants are required to point to where the specification has support for this term or remove it from the claims. Alternatively, if

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applicants agree with the definition of the term "decomposition" as taught by Stenesh, amending the claims to recite "intracellular decomposition" would be sufficient to obviate this rejection.

- 13. Claims 6-9 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a. Claims 6-9 and 12-13 are indefinite for reciting "42°C, \_\_\_7" in claim 6 because it is unclear what is meant by the term. It is unclear if an additional term of phrase was meant to be added or needs to be added to the claim.
- b. Claims 6-9 and 12-13 are indefinite for reciting "amino acid sequence shown in SEQ ID NO:1" and "nucleotide sequence shown in SEQ ID NO:2" because the exact meaning of the phrases are not clear. SEQ ID NO:1 is a nucleotide sequence and SEQ ID NO:2 is an amino acid sequence.
- c. Claims 7 and 12 are indefinite for reciting "consisting of part of the protein" in claim 7 because the exact meaning of the phrase is unclear. What "part" of the protein is being claimed? Is "part" an amino acid, a carbon atom, etc?

#### Summary

14. No claims are allowed.

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15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry R. Helms, Ph.D, whose telephone number is (703) 306-5879. The examiner can normally be reached on Monday through Friday from 7:00 am to 4:30 pm, with alternate Fridays off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, can be reached on (703) 308-3995. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.
- 17. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the

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Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-7401.

Respectfully,

Larry R. Helms Ph.D.

703-306-5879

PAMARYEXAMINE

SHEELA HUFF PRIMARY EXAMINED